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GILLES DE LA TOURETTE SYNDROME TREATED WITH LSD

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Introduction

CHARACTERISTICALLY this syndrome has its onset in late childhood beginning with multiple motor tics which early on involve the face, head and shoulders but soon spread to the trunk and extremities. Later a verbal component is added, usually no more than a grunting or barking sound. Laughing, sniffing, wheezing and shrieking noises have also been described. In time a distinct word or phrase replaces these sounds and this utterance is characteristically obscene (COPROLALIA). A few patients never utter words at all, or confine themselves to neutral words like "tut, tut" or "good". Obscene movements are rare.

The syndrome was first described by Gilles De La Tourette in 1895. His recorded observations included widespread motor tics, verbal tics, onset in pre-adolesence, and a progressive course ending rather uniformly in schizophrenia. More recent reports suggest that therapeutic intervention can favourably influence the course of the illness. Fernando (1967) in a very excellent review of the literature, accepted 65 cases out of 85 cases published as "proven" cases and he reported four new cases. Of the 69 patients 31 showed sustained improvement. In seven more a good outcome was also found, but the duration of improvement was not clear. Outcome was not reported on in 11 patients. Mahler and Luke (1946) reported follow up on eleven child tiqueurs who satisfied the criteria of this syndrome. Four were much improved and three more were better, but still suffered some residual symptoms. Follow up was at least three years after discharge from hospital and there was no correlation between the treatment effort and the result in this analytically based study. One of these children satisfied the original description rather completely by ending up in a psychiatric hospital with a diagnosis of schizophrenia. Bruch and Lawrence (1968) report on a 12 year old boy whose symptoms remitted when his mother developed a psychotic episode. Clark (1966) convincingly records cure in two of three cases at four year follow up, all treated with behaviour therapy. The third patient broke off treatment before it was concluded. MacDonald (1963) treated a 19 year old female with amytal and methidrine abreactions and considered "that her central problem was aggression". The patient was symptom free in eight weeks. Mahler, Luke and Daltroff (1945) agree that the tic is an expression of aggression.

The physical symptomatology obviously suggests the possibility, at least, of basal ganglia pathology. On microscopy an immature cell structure of the striatum was recorded in one patient (Balthaser 56). The syndrome may

follow Encephalities Lethargica and Sydenhams Chorea—both conditions affect the corpus striatum (Chapman, Pilkey and Gibbons 58). Whether physically induced or not, the illness seems to respond to a psychologically based treatment approach.

The present report has two aims.

1 To emphasise the phenomena of this illness for clinicians who, without awareness of it, could only be perplexed and bemused by the rather alarming symptomatology. Early diagnosis should lead to a psychiatric rather than a neurological referral.

2 To record the use of Lysergic Acid Diethylamide (L.S.D.) in the treatment of this condition.

Case History

The patient, a 16½ year old male, had his first psychiatric admission to the Royal Edinburgh Hospital in December 1964. He lived in a small town 100 miles from Edinburgh but he had been attending a neurological clinic in Edinburgh and, with no significant improvement over a period of 21 months, a psychiatric admission was eventually requested.

He was the eldest of two siblings. A younger brother was still at school and living at home. Delivery was normal and full term. Development milestones were not delayed. The only neurotic traits in childhood were nail biting and a rather persistent fear of the dark. He had suffered measles, chicken pox, whooping cough and mumps, recovering quickly from each illness. At the age of 10 he had his adenoids removed and postoperatively he had one convulsion. There was no family histor yof epilepsy. The family was dominated by a strict, uncompromising father, a gardener by occupation, but innately capable of far more. The patient's intellectual endowment, which tested out as average, had not allowed him to realize father's hopes either and at the time of admission the 13 ear old brother was the preferred son. Mother, by comparison, was a neutral figure in the background.

At the age of seven an older boy forced his erect penis into the patient's mouth and this was the subject of a guilt laden confession to the parents five years later.

In November 1962 at the age of 14½ jerky movements started in the patient's shoulders and upper arms and soon spread to involve his legs. These occurred about twelve times daily without alteration of consciousness. Because of them he had to leave school and he started a plumbing apprenticeship with a considerate and understanding local employer. He had his first neurological admission to a local hospital in January 1963. Physical examination and investigation including L.P. and an E.E.G. was judged as normal. He was referred for a second neurological opinion to Edinburgh in April 1963 and on a regimen of Ethosuximide (Zarontin) 250 mg T.D.S. he improved considerably only to deteriorate towards the end of the year. By then the verbal outbursts were conspicuous. On E.E.G. in a series showed "paroxysmal verbral dysfunction". In March 1964 he had his first psychiatric contact. Six out patient visits uncovered quite gross obsessional and compulsive symptomatology which included hand washing rituals and preoccupation with personal cleanliness. He failed to respond to sedating and tranquilizing drugs or to one Deamphetamine Sulphate abreaction. Despite his gross behaviour he continued to work until admission to the Royal Edinburgh Hospital. The signs on admission were striking and quickly labelled by an experienced consultant. The vocal component was either incoherent or quite distinct and obscene. The unit where he was treated has good tolerance for abnormal behaviour and often he tested it fully. It was clear to the staff that his illness allowed the expression of enormous aggression and hat this feeling was uncomfortable for the patient. L.S.D. was chosen as the abreactive agent because, in keeping with his obsessionality, the patient was very rigid and inflexible in the usual psychotherapeutic interviews. It was felt that he could benefit from the actual L.S.D. experience. The material uncovered was straightforward and classically adolescent. He had little time for either parent and yet he recognised his physical dependence on them which was unlikely to end as long as he had these gross symptoms. He was searching for some meaning in life and an identity. Religion and his relationship with the world were recurring themes. Information on sexual matters, e.g. female anatomy, sexual psychology, conception, was sought and given. In each relationship with patients, with nursing staff and with changing medical staff he

seemed to be unable to commit himself fully. At some stage all his relationships broke down. Meanwhile father was making treatment somewhat more difficult by protesting that his son was getting no better (in a sense true) and that he should be out of hospital facing up to his problems. The only medication the patient had during his nine months hospitalization was L.S.D. on seventeen occasions and stat orders of Largactil infrequently. He eventually felt that he should try to get back to work as a plumber. We felt that the job was very much unfinished and the whole treatment attempt unsatisfactory. He was discharged in September 1965. By mid '66 the patient was still in difficulty but it seemed from our contact with his general practitioner ha his symptoms were only present in his home. The general practitioner had often noticed the patient with his friends around cafes and betting shops and in this setting he appeared unconcerned and sympom free. On these observations the general practitioner decided to refuse the patient further sickness certification and arranged his first job since leaving hospital. The patient reluctantly responded to the ultimatum, changed jobs within two weeks to join the merchant navy and has been well ever since. His symptoms have all but disappeared—the motor component completely—and all that remains of his verbal explosions is an occasional hesitancy followed by over-emphasis on the succeeding word.

We cannot claim that hospitalization or the L.S.D. sessions cured him. We do know that following his discharge the manifestations of his illness were largely confined to his own home and were not disabling socially. At follow up he had remained well for two years. His illness had lasted four years.

Summary

The syndrome of Gilles De La Tourette is described. A case history is reported and the use of L.S.D. abreactive treatments in this condition is recorded for the first time.

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